

4.9 VISUAL RESOURCES/LIGHT AND GLARE

This section examines the existing setting and potential visual impacts on both land and water uses that may result from operation of the Long Wharf. Visual consequences of accidental spills from vessels in transit and from operations at the Long Wharf are also addressed. Alternatives to the proposed Project are also examined.

4.9.1 Environmental Setting

General Visual Characteristics of the Bay Area

San Francisco and San Pablo Bays' shoreline contains a range of visual stimulation consisting mainly of urbanized and industrial areas, with occasional rural and open space areas, coastal wetlands and salt evaporation ponds. The landform throughout most of the area is hilly terrain. Where there is no development, this open area is generally covered with low vegetation.

The greatest area of urbanization is within the central and south-central portion of San Francisco Bay. From San Francisco south to Palo Alto, urban development is prevalent on the western shoreline. On the eastern shoreline, urban development is continuous from San Leandro to Pinole Point, but from there eastward is fairly undeveloped.

San Francisco and San Pablo Bays contain about 90 percent of California's remaining coastal wetlands. Major preserves and shoreline parks include Suisun Bay Marsh, with numerous duck hunting preserves, San Pablo Bay National Wildlife Refuge off of Tubbs Island, which is accessible by boat, and Point Pinole Regional Shoreline. China Camp State Park, along the southwest shore of San Pablo Bay, preserves a historic Chinese shrimp-fishing village. Coyote Hills Regional Park and San Francisco Bay National Wildlife Refuge protect important wetland acreage in the South Bay for wintering waterfowl. Many other small parks, piers, and recreational marinas also provide access to the shoreline.

The southern portion of the Bay Area contains several large areas of salt evaporation ponds. One is located north of the San Francisco Bay National Wildlife Refuge on the eastern shoreline, and another across the Bay on the western shoreline. Several others are also along the far southern end.

Within the Bay Area, there are numerous ports, harbors, marine terminals, and naval terminals. A description and a map of these facilities are presented in Section 4.0, Existing Environment and Impacts Analysis. Marine vessel traffic is a common sight throughout the Bay Area.

Visual Character of Long Wharf and Adjacent Area

The project area is located in the western portion of Contra Costa County on the San Francisco Bay, just south of the Richmond-San Rafael Toll Bridge, and just north of the community of Point Richmond. The landform in the immediate vicinity of the Long Wharf is gently rolling hills. North of the bridge, toward Castro Point and the Point Molate Naval Fuel Depot, development is sparse with the visual character being that of open, undeveloped lands. To the south, the Refinery, consisting primarily of tanks, pipelines, and the Long Wharf, is the prominent feature along the shoreline from the Toll Bridge to Point Richmond. South of the Long Wharf the community of Point Richmond is characterized by older homes, clustered close together, and built on the hills. Between the developed structures, the rolling hills generally have areas of low ground vegetation, interspersed with mature trees, which is characteristic of the Bay Area. Farther north, Point San Pablo contains the PakTank terminal with the terrain dotted by tanks. Farther south is the Port of Richmond.

The Chevron Richmond Long Wharf is a T-head pier 3,440 feet (.65 miles) long connected to the shore by a 4,200-foot (.80 miles) piled causeway. Four deep-water cargo berths are located along the west side of the pier with two cargo berths are located on the east side. The pier is constructed of precast concrete piles, and the deck is precast concrete panels. Figures 4.9-1 and 4.9-2 show the Long Wharf and immediate area.

From a visual perspective, the most sensitive receptors are those residents of Point Richmond who have views of this northern portion of San Francisco Bay and the Long Wharf. For many, the Long Wharf is a prominent feature in the Bay. Figures 4.9-3 and 4.9-4 show views of the Bay from Point Richmond.

Night lighting of the area is typical of a residential hillside community and includes outside house lights and street lights. Security lighting for the wharf is also seen, including street-type lighting on the causeway.

Outer Coast

Outside of the Golden Gate, one of the more pristine areas is the Farallon Islands, located 27 nautical miles west of Point Bonita in Marin County. The Islands rise from the edge of the continental shelf forming jagged, rocky outcroppings, and are the most important seabird nesting site on the coast. The Gulf of Farallones and the Monterey Bay are Marine Sanctuaries located off the coast and contain protected resources.

A large portion of the northern California coast remains representative of the shoreline of years past. Little development has occurred and areas along the northern California coast remain in pristine form. From the Golden Gate north, the shoreline consists of dramatic coastline features including rolling hilly coastal landforms dropping to sandy

- 1 Figure 4.9-1 – View From Landside of Chevron Long Wharf
- 2 And Figure 4.9-2 – View of Shoreline Adjacent to Chevron Long Wharf
- 3

- 1 Figure 4.9-1 – View From Landside of Chevron Long Wharf
- 2 And Figure 4.9-2 – View of Shoreline Adjacent to Chevron Long Wharf
- 3

- 1 Figure 4.9-3 – Views from Hills in Point Richmond
- 2 Figure 4.9.4 – View from Shoreline at Point Richmond
- 3

- 1 Figure 4.9-3 – Views from Hills in Point Richmond
- 2 Figure 4.9.4 – View from Shoreline at Point Richmond
- 3

beaches, jagged rock outcroppings forming hazards to marine vessels in the nearshore, cliffs that drop to the sea, and large, flat beach areas with dunes. Small shoreline communities and picturesque harbor areas also dot the shoreline in some areas. A large number of rivers and creeks cut the coastline, adding visual interest. Established preserve areas are also along the coastline. Vegetation is diverse, ranging from salt marsh vegetation to Douglas fir and redwood forests.

The southern California coastline from Santa Barbara south ranges from undeveloped stretches (southern Orange County/northern San Diego County), to intense development (San Diego, Orange and Los Angeles counties), to lesser intense development, but still much urbanization toward Santa Barbara.

Additional details of the resources of the outer coast are presented in the Unocal Marine Terminal EIR (Chambers Group 1994) and the Gaviota Marine Terminal EIR (Aspen Environmental Group 1992).

4.9.2 Regulatory Setting

Visual Policies

The Long Wharf and Refinery are located within the city of Richmond. The most applicable land planning guidance is from the city of Richmond. The City's General Plan has as one of its general goals to "promote a sense of 'place' and create a community of pleasant contrasts through land use planning, urban design, and use of visual elements such as scenic routes . . ." The Open Space Element of the General Plan contains policies addressing the protection of the natural character of the hills and ridges; the purchase of vista points and their inclusion into a trail system, scenic parkway, or park, and provision of overlooks; and protection of view corridors by controlling the siting and height of buildings.

As presented in Section 4.5.2, Regulatory Setting, the goal of the Bay Trail Plan is to provide a shoreline trail around San Francisco Bay. Portions of such a trail exist near the Long Wharf along I-580, including the opportunity for views of the Bay from a portion of the trail just north of the I-580 Toll Plaza for the Richmond-San Rafael Bridge. The EBRPD, the BCDC, and the City all work together to promote the shoreline trail concept and to open vistas to the public.

4.9.3 Significance Criteria

Visual impacts are considered adverse and significant if one or a combination of the following apply:

- Routine operations and maintenance visually contrast with or degrade the character of the viewshed.

➤ Actions result in changes in expectations of viewers resulting in a negative impression of the viewshed.

➤ Night lighting would result in glare conditions affecting nearby residences.

Because of the time factor involved in oil dispersion, visual impacts from spills are considered to be significant adverse (Class I) impacts if first response efforts would not contain or cleanup the spill, resulting in residual impacts that would be visual to the general public on shoreline or water areas. If a spill occurs that would be contained and cleaned during the first response, that spill would be considered a significant adverse (Class II) impact.

4.9.4 Impacts Analysis and Mitigation Measures

4.9.4.1 Long Wharf I Routine Operations and Potential for Accident Conditions

Impact VR-1: Visual Effects from Routine Operations Over the 30-Year Lease Period

Proposed Project operations involve tanker activity at the existing Long Wharf and vessel transit through established shipping lanes in the Bay. The Long Wharf and Refinery have been in place for a long time, and the proposed Project site is industrial in character. No visual changes from continued operations would occur. Visual impacts or night lighting impacts associated with continued operations are adverse, but less than significant (Class III).

Proposed Project operations involve tanker activity at the existing Long Wharf and vessel transit through established shipping lanes in the Bay. The Long Wharf and Refinery have been in place for a long time, and the proposed Project site is industrial in character. No visual changes from continued operations would occur. Ship berthing is part of routine water-based industrial operations at wharves and piers. Ships berthing at the Long Wharf would continue to appear as shown in the figures in Section 4.9.2, Regulatory Setting. The berthing of ships at the Long Wharf is hardly noticeable from the shoreline at Point Richmond because the wharf blocks views of the ships due to the length of the wharf. Viewers from higher elevations would continue to have more direct views of the ships, as would viewers on the water because the line of sight from the viewer to the ships would not be blocked. From the higher elevations, the ships would continue to appear only slightly taller than the wharf structure, and tend not to detract from the overall Bay view. From the water, ships berthed at the Long Wharf would continue to appear as a use consistent with that of the Long Wharf and Bay. Therefore, continued project operations would not change the visual character or compatibility and impacts are considered adverse, but less than significant (Class III). Because no significant changes would occur to the visual character of the Long Wharf, viewer expectations would also not result in adverse changes. Vessels currently transit near the wharf on their way from San Francisco Bay to San Pablo Bay; therefore, transit operations would result in adverse, but less than significant visual impacts (Class III).

Similarly, no impacts are expected from construction associated with modification to Berth No. 4. The berth is far enough away from the shoreline that construction activity would not be obtrusive. Impacts would be adverse, but less than significant (Class III).

Night lighting for operations would include continue with the existing lights at the T-head portion of the structure to support loading/unloading activities. These lights are pointed toward the loading/unloading activity and away from shoreline viewers. The ships also have lighting directed toward the wharf, which is also directed toward the shoreline. Due to the distance from the T-head structure to the shoreline, over 4,200 feet (.80 miles), the ship's lights diminish to very small specks in the distance and do not cause glare to those sensitive receptors on the shoreline. No additional lighting would be associated with the causeway over that which currently exists. Impacts would be adverse, but less than significant (Class III) from night lighting.

Vessel transit along the outer coast would blend in with other accepted tankering operations. No new visual elements would be added and public sensitivity toward views off the coast would not change. Impacts would be adverse, but less than significant (Class III).

VR-1: No mitigation is required.

Impact VR-2: Visual Effects from Accidental Releases of Oil At or Near the Long Wharf

The visual impacts of a spill could last for a long period of time, depending on the level of physical impact and cleanup ability, and are considered to be adverse and significant (Class I or II).

This analysis considers the occurrence of accidental spills separate from normal operations. In general, the potential impacts resulting from such an occurrence would tend to degrade the visual quality of the water and shoreline. The degree of impact is influenced by factors not limited to location, spill size, type of material spilled, prevailing wind and current conditions, the vulnerability and sensitivity of the shoreline, and effectiveness of early containment and cleanup efforts.

The greatest risk of a spill is from small accidents at the Long Wharf during normal operations. While there is less risk of spill during tankering, the size of a spill that could result is much greater. Examples of spills and areas oiled at the Long Wharf, in the Bay, and for coast tankering lanes are presented in Section 4.0, Existing Environment and Impacts Analysis, in the discussion of oil spill scenarios. The scenario and receptor mode modeling represents possible paths of migration under variously defined conditions, but does not represent every case that may occur. The following discusses the visual impacts expected to occur in the event of a spill.

Generally, small leaks and spills (50 through 100 bbls) would be easily contained with contingency measures employed at the Long Wharf. The Long Wharf is in an area of rapidly moving current. If a spill is not detected immediately, or if a moderate size spill would occur at a rate unable to be quickly contained due to the rapid current, then the spread of the spill over a large area could occur. For example, spills originating at the Long Wharf, approximately 1,000 bbls in size, would likely affect a good portion of the area between the Bay Bridge and the mouth of Carquinez Strait. The oil spill examples presented in Section 4.0, Existing Environment and Impacts Analysis, indicate that a good portion of water area can be covered by this size of spill. Details of the spread of each of the five scenarios are presented in Appendix B.

Visually, oiling conditions could range from light oiling, which appears as a surface sheen, to heavy oiling, including floating lumps of tar. Light product spills generally volatilize relatively rapidly, and little remains within 24 to 48 hours after a spill. Heavy crude oil may disappear over a period of several days, with remaining heavy fractions lasting from several weeks to several months floating at or near the surface in the form of mousse, tarballs, or mats. Therefore, the presence of oil on the water would change the color and, in heavier oiling, textural appearance of the water surface. Oil on shoreline surfaces or nearshore marsh areas would cover these surfaces with a brownish-blackish, gooey substance.

Such oiling would result in a negative impression of the viewshed. The public, as they become aware of a spill, react negatively to the visual effects of a spill. Sensitivity becomes high and awareness of the negative change in the environment increases. Unless the spill can be contained by immediate booming and cleanup, the visual effects of even a small spill of about 500 bbls can be significant (Class I).

The impact of a spill could last for long periods of time, depending on the level of physical impact and cleanup ability. In events where light oiling would disperse rapidly, significant (Class II) impacts are expected. In events where medium to heavy oiling occurs over a widespread area, and where first response cleanup efforts are not effective, leaving residual effects of oiling, significant (Class I) impacts would be expected. The physical effort involved in cleanup itself, including the equipment used, would contribute to a negative impression of the environment and the visual impact.

The modeling indicates that spills from the Long Wharf generally would affect shoreline areas on the East Bay north of the Long Wharf that may include, but not be limited to, Castro Point, Point San Pablo Yacht Harbor, Point Pinole and the Point Pinole Regional Shoreline, Pinole Bayfront Park, San Pablo Bay Regional Park, and shoreline amenities heading into the mouth of Carquinez Strait. Areas south of the Long Wharf may include the Point Richmond shoreline, Keller Beach, Ferry Point, Brickyard Cove, Brooks Island Regional Preserve, Richmond Marina Bay, Marina Green, Point Isabel Regional Shoreline, and Point Isabel. Areas potentially affected on the West Bay shoreline across San Pablo Bay include Kiel Cove, Bluff Point, Tiburon Cove, Paradise Beach County Park, Paradise Cove, Corte Madera State Ecological Reserve, Point San Pedro, and McNears Beach.

For these five spill scenarios, the model also shows the length of shoreline hit by beached oil and the number of piers, marinas, and shoreline recreational areas that would be affected. These are presented in Table 4.9-1.

Table 4.9-1
Number of Piers, Marinas, and Shoreline
Recreational Areas Affected Based on Oil Spill Scenarios

Scenario	Piers	Marinas	Shoreline Recreation Areas	Length of Shoreline Affected (miles)
Berkeley/Emeryville No. 33	4	19	13	28.08
Brooks Island/Richmond No. 73	7	27	24	38.92
Southeast San Pablo Bay No. 93	3	7	9	19.26
West-Central Bay No. 68	5	10	11	22.70
West San Pablo Bay No. 91	3	10	11	22.03

Other areas may also be contacted by oil given the right wind and current conditions, and the size and origin of the spill. For example, the oil spill modeling results presented in Section 4.0, Existing Environment and Impacts Analysis, show that if a large spill (100,000 bbls) were to occur in the shipping lanes near Alcatraz Island, oil could spread and beach at almost all shoreline points within the Central Bay and San Pablo Bay areas, as well as affect portions of the South Bay and Carquinez Strait (Bay Scenarios No. 9 and No. 10, 100,000-bbl crude oil spills).

The capability to immediately respond and deploy appropriate containment booming would also influence the extent of affected shoreline. Response capability is analyzed in Section 4.1, Operational Safety/Risk of Accidents.

It is impossible to predict with any certainty the potential consequences of spills; therefore, visual impacts can be considered to be adverse and significant (Class I or II), depending on the effectiveness of first response containment and cleanup.

Accidents Along the Outer Coast

Spills along the outer coast could result in significant (Class I or II) impacts, where spills would be visible in the nearshore zone or at the shoreline. Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of views along the outer coast are more varied than within the Bay. Along many portions of the outer coast, public usage is low. In such areas, the public perception and expectations of viewers would not change as much as those areas

where the public frequents. In high use areas, such as coastal park and beach areas, ecological preserve areas, communities and harbors, and other areas where a higher number of viewers would be present, visual sensitivity would be high where cleanup efforts and residual effects were occurring.

Mitigation Measures for VR-2:

VR-2. Mitigation measures for oil spill impacts include those measures for contingency planning and response as presented in Operational Safety/Risk of Upset and Biological Resources.

Rationale for Mitigation: Those measures presented in other sections provide improved oil spill capabilities, oil spill containment measures and protection of resources. Those measures would help to minimize oil spills and maximize cleanup efforts, resulting in less impact to the visual environment. With implementation of those measures the risk to the visual environment can be reduced to less than significant for small spills or spills that would be able to be contained and cleaned.

Residual Impacts: Even with implementation of mitigation for oil spill impacts, visual resources may be impacted from large spills and impacts would remain significant (Class I).

4.9.4.2 Oil Spills from Vessels in Transit in Bay or Along Outer Coast

Impact VR-3: Visual Effects of Oil Spills from Vessels in Transit

Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of viewers would result in a negative impression of the viewshed and result in significant adverse (Class I or II) impacts, depending on the various characteristics of a spill and its residual effects.

Vessels transiting the shipping lanes also pose a risk of spills from accidents. A moderate to large spill has the potential to spread within a large area, with floating oil and oil contacting sensitive shoreline resources given the right wind and current conditions, and the size and origin of the spill. For example, oil spill modeling from the Unocal EIR (Chambers Group 1994) showed that if a large spill (100,000 bbls) were to occur in the shipping lanes near Alcatraz Island, oil could spread and beach at almost all shoreline points within the Central Bay and San Pablo Bay areas, as well as affect portions of the South Bay and Carquinez Strait (Bay Scenarios No. 9 and No. 10, 100,000-bbl crude oil spills from Unocal document). While spills would be significant, responsibility for spills for those vessels enroute to the Shore wharf would be the responsibility of the ship's operators/owners and not Shore Terminals LLC, as Shore does not own any vessels. Response capability is analyzed in Section 3.1, Factors Used in Selection of Alternatives.

Spills along the outer coast could result in significant adverse (Class I or II) impacts, where spills would be visible in the nearshore zone or at the shoreline. Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of views along the outer coast are more varied than within the Bay. Along many portions of the outer coast, public usage is low. In such areas, the public perception and expectations of viewers would not change as much as those areas where the public frequents. In high use areas, such as coastal park and beach areas, ecological preserve areas, communities and harbors, and other areas where a higher number of viewers would be present, visual sensitivity would be high where cleanup efforts and residual effects were occurring.

It is impossible to predict with any certainty the potential consequences of spills; therefore, visual impacts can be considered to be adverse and significant (Class I or II), depending on the effectiveness of first response containment and cleanup. Response capability for spills from any ships in transit would defer to MSRC, as described in the project description.

Mitigation Measures for VR-3:

VR-3. Mitigation measures for accidents in the shipping lanes would be Chevron's responsibility only for Chevron-owned vessels. Responsibility for accidents for non-Chevron owned vessels would fall to the vessel operator/owner. Chevron shall implement measures OS-7a and OS-7b in Operational Safety/Risk of Upset.

Rationale for Mitigation: Response capability is limited to the vessel operator/owner for containment and cleanup, thus non-Chevron owned vessels are not the responsibility of Chevron for spills in the shipping lanes. However, Chevron's participation in VTS upgrade evaluations, and Chevron response actions for spills near the Long Wharf help to reduce potential impacts to shoreline and recreational areas. Impacts to these areas near the Long Wharf may be able to be reduced to less than significant.

Residual Impacts: Even with implementation of mitigation for oil spill impacts, visual impacts would potentially remain significant (Class I).

4.9.5 Impacts of Alternatives

Impact VR-4: No Project Alternative

Temporary visual effects would occur during decommissioning; impacts would be beneficial with removal of the structure (Class IV).

Under the No Project Alternative, Chevron's lease would not be renewed and the existing Long Wharf would be subsequently decommissioned with its components abandoned in place, removed, or a combination thereof. The decommissioning of the Long Wharf would follow an Abandonment and Restoration Plan as described in Section 3.3.1, No Project Alternative.

Under the No Project Alternative, alternative means of crude oil / product transportation would need to be in place prior to decommissioning of the Long Wharf, or the operation of the Chevron Refinery would cease production, at least temporarily. It is more likely, however, that under the No Project Alternative, Chevron would pursue alternative means of traditional crude oil transportation, such as a pipeline transportation, or use of a different marine terminal. Accordingly, this EIR describes and analyzes the potential environmental impacts of these alternatives. For the purposes of this EIR, it has been assumed that the No Project Alternative would result in a decommissioning schedule that would consider implementation of one of the described transportation alternatives. Any future crude oil or product transportation alternative would be the subject of a subsequent application to the CSLC and other agencies having jurisdiction, depending on the proposed alternative.

During dismantling of the Long Wharf, there may be minor visual impacts associated with the construction activity. However, this would not appear very different from current operations, other than barges and cranes would be removing structural components.

After construction, there would be no Long Wharf, and the viewshed would be opened, resulting in a beneficial (Class IV) impact. A similar level of impact as described for the proposed Project may be transferred to other Bay area terminals.

VR-4: No mitigation is required.

Impact VR-5: Full Throughput via Pipeline Alternative

With no Long Wharf operations, refinery operations would be maintained via pipelines. Temporary visual effects would occur within areas of pipeline construction, and generally would be visually adverse, but less than significant (Class III). However, construction in any designated scenic corridors and vistas, unique urban and nonurban open space, preserve areas, or areas containing visually interesting landform and/or vegetation covers that could be lost. In those areas, visual impacts are considered to be significant and adverse (Class I or II).

With this alternative, use of the Long Wharf would cease and the required operational levels of crude intake and product export would be maintained by use of pipelines. Temporary visual effects would occur within areas of pipeline construction. These effects would result from the grading, trenching, and pipeline installation actions. Pipeline construction through urban areas typically would occur within already existing easements or within roadways. This construction would be visually adverse, but less

than significant (Class III). Those areas of greatest potential for significant impact would be nonurban areas and areas of high visual sensitivity. These may include designated scenic corridors and vistas, unique urban and nonurban open space, preserve areas, or areas containing visually interesting landform and/or vegetation covers that could be lost. In such areas, landforms may not be restorable to previous conditions and residual impacts would result from the scarring of the landscape. In these areas, visual impacts are considered to be significant and adverse (Class I or II).

Mitigation Measures for VR-5:

VR-5. Mitigation includes avoidance of alignments through sensitive scenic areas, unique landforms, and areas where vegetation would be lost or unable to be restored. If avoidance is not possible, then methods to minimize losses need to be evaluated.

Rationale for Mitigation: The goal of the mitigation is to minimize, to the greatest extent feasible, visual impacts caused by pipeline installation.

Residual Impacts: Class I impacts may remain if the vista, landform, or vegetative cover is permanently affected by construction.

Impact VR-6: Conceptual Consolidation Terminal Alternative

A new Consolidation Terminal would have the potential to block views and may result in an adverse impact; however, a project specific analysis would be required. The Long Wharf would not contribute to that potential impact. However, pipeline connections to the Refinery would be required, and pipeline construction in any designated scenic corridors and vistas, unique urban and nonurban open space, preserve areas, or areas containing visually interesting landform and/or vegetation covers that could be lost. In those areas, visual impacts are considered to be significant and adverse (Class I or II).

Construction and operation of a new consolidation terminal has the potential to result in significant, adverse visual impacts by introducing a new structure within the viewshed. While it is unlikely that a new terminal would block views, it would introduce an element into the viewshed that may be deemed by the public to degrade the character of that viewshed and result in a negative impression of that viewshed. A project-specific environmental analysis would be required to examine the potential impacts of the new terminal. With this alternative, the Long Wharf and the new terminal would both be operating. The Long Wharf would not contribute in an adverse way to this impact because it is an existing structure.

Pipeline connections would be required and pipeline construction would have potential impacts as described for Impact VR-5.

Mitigation Measures for VR-6:

VR-6. Adherence to MM VR-5 for pipeline construction.

Rationale for Mitigation: The goal of the mitigation is to minimize, to the greatest extent feasible, visual impacts caused by pipeline installation.

Residual Impacts: Class I impacts may remain if the vista, landform, or vegetative cover is permanently affected by construction.

4.9.6 Cumulative Projects Impacts Analysis

Impact CUM-VR-1: Visual Effects of Routine Cumulative Tanker Activities

The Bay area vessel movements comprise a large number of tankers, ships, barges, sport and other vessels that are everyday occurrences in the visual environment. Expectations of the public with respect to cumulative tanker operations associated with routine operations are considered to be an adverse, but less than significant impact (Class III).

Tanker movements throughout the Bay and in the vicinity of the Long Wharf are part of an established pattern of activity that has occurred and will continue to occur. The Long Wharf tanker movements in the Bay and the operations activity at the Long Wharf contribute to that activity. Tanker movements in the Bay are an acceptable visual action. The expectations of the public of the cumulative environment would not result in significant changes and impacts are considered to be adverse, but less than significant (Class III).

CUM-VR-1: No mitigation is required.

Impact CUM-VR-2: Visual Effect from Accidental Releases of Oil

Spills from multiple sources that would overlap in time (either the spill occurrence or cleanup operation) is unlikely, however, such incidents would result in significant adverse visual impacts (Class I or II).

A spill can begin as a very localized incident and spread over a very large area. If more than one spill occurs within a very short timeframe within the Bay or along the outer coast, significant visual impacts (Class I or II) would result, depending on the adequacy of first response clean up efforts. Chevron would have responsibility for Chevron-owned vessels.

Mitigation Measures for CUM-VR-2:

CUM-VR-2. Mitigation includes adherence to those measures presented in Operational Safety/Risk of Upset and Biological Resources.

Rationale for mitigation: Those measures provide improved oil spill capabilities, oil spill containment measures and protection of resources. Those measures would minimize oil spills and maximize cleanup efforts, resulting in less impact to the visual environment. With implementation of those measures the risk to the visual environment can be reduced to less than significant for small spills. Each marine terminal within the Bay Area is also responsible for minimizing spill risks at their facility.

Residual Impacts: Impacts to the cumulative visual environment could remain significant (Class I) for large spills.

Table 4.9-2 summarizes Visual Resources/Light and Glare impacts and mitigation measures.

**Table 4.9-2
Summary of Visual Resources/Light
and Glare Impacts and Mitigation Measures**

Impacts	Mitigation Measures
VR-1: Visual Effects from Routine Operations and Potential for Accident Conditions	VR-1: No mitigation required.
VR-2: Visual Effects from Accidental Releases of Oil at or Near the Long Wharf	VR-2: Adherence to those measures presented in Operational Safety/Risk of Upset and Biological Resources Sections.
VR-3: Visual Effects of Oil Spills from Vessels in Transit	VR-3: Accident responsibility falls on the owner of the vessel. Chevron shall implement MM OS-7a and MM OS-7b in operational safety/risk of upset.
VR-4: No Project Alternative	VR-4: No mitigation required.
VR-5: Full Throughput via Pipeline Alternative	VR-5: Avoidance of alignments to sensitive landforms and vegetation. If avoidance is not possible, methods to minimize losses will be evaluated.
VR-6: Conceptual Consolidation Terminal Alternative	VR-6: Adherence to MM VR-5 for pipeline construction.
CUM-VR-1: Visual Effects of Routine Cumulative Tanker Activities	CUM-VR-1: No mitigation required.
CUM-VR-2: Visual Effect from Accidental Releases of Oil	CUM-VR-2: Adherence to those measures presented in Operational Safety/Risk of Upset and Biological Resources Sections.

1
2

This page intentionally left blank.